



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,675	12/16/2003	Stephan J. Jourdan	2207/17047	2840
23838	7590	10/06/2006	EXAMINER	
KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005			TREAT, WILLIAM M	
			ART UNIT	PAPER NUMBER
			2181	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,675

Applicant(s)

JOURDAN ET AL.

Examiner

William M. Treat

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/22/06.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

Art Unit: 2181

1. Claims 1-29 are presented for examination.
2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
4. Claims 1-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
5. Claims 1-29 make reference to checking predictions generated by a checking predictor (element 86 in applicants' Fig. 2). On pages 4 and 5, paragraph 18, applicants state: "In the illustrated example, the next-line predictions 22, 24 have a latency of approximately one clock cycle, where the checking predictions 26, 28 have a latency of approximately three clock cycles. The longer latency of the checking predictions 26, 28 is due to the more complex prediction algorithms associated with the checking predictions 26, 28." On page 7, paragraph 25, applicants state: "FIGS. 7 and 8 show a

next-line predictor 72 that has a bimodal component 74, a global component 76, a return stack buffer (RSB) component 78 and an indirect branch component 80. The bimodal component 74 generates bimodal predictions 75 based on previous next-line predictions and the global component 76 generates global predictions 77 based on the previous next-line predictions. The global component 76 also generates indirect predictions 80 based on indirect branch values. The RSB component 78 generates return predictions 79 based on a return stack buffer value. The next-line predictor 72 selects from the bimodal predictions, the global predictions, the return predictions and the indirect predictions to obtain current next-line predictions. Thus, the set of predictions 73 generated by the next-line predictor 72 closely approximate the predictions of a more complex checking predictor. The examiner considers the checking predictor and how it functions to be essential to the enablement of applicants' claims and invention; yet, the description of the checking predictor is so limited as to preclude one of ordinary skill from constructing applicants' checking predictor and, as a result, practicing applicants' invention. Applicants have argued that there is prior art related to their invention; therefore, one of ordinary skill in the art would be able to construct their checking predictor. The examiner would point out that there are over 600 patents in just the U.S. Patents data base with claims reciting some form of branch prediction using a branch predictor. If one accepts applicants' line of reasoning, certainly one of ordinary skill must have been able to construct the extra 599 or more patents from knowledge of the first patent, rendering them unpatentable. Put another way, an inventor who invents a method for transatlantic transmission of data using an

undersea cable would not render obvious to one of ordinary skill how one would create a method of transatlantic transmission of data using radio or satellites. Merely saying that one of ordinary skill could create a more complex checking predictor than applicants' next line predictor or that one of ordinary skill could use more complex algorithms than applicants' next line predictor does not say one of ordinary skill could create the invention conceived of by applicants without additional description/enablement.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.


8. Each of applicants' claims make reference to generating checking predictions and claims 18-29 explicitly claim a checking predictor but applicants' description of applicants' checking predictor and how it functions to generate a checking prediction is so limited as to preclude the examiner from determining the true metes and bounds of applicants' claims. Surely, applicants cannot claim to have conceived off/invented all forms of checking predictor which are more complex than their next line predictor; therefore, the examiner cannot determine, with any clarity, the limits to applicants' claimed invention. See paragraph 5, *supra*, for a further explanation of related issues.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication should be directed to William M. Treat at telephone number (571) 272-4175.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WILLIAM M. TREAT
PRIMARY EXAMINER